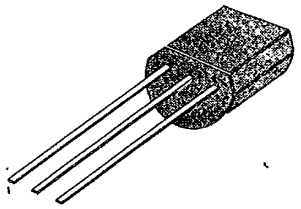
KSC1072 NPN EPITAXIAL SILICON TRANSISTOR

LOW FREQUENCY POWER AMPLIFIER

- Complement to KSA707
- Collector-Base Voltage V_{CBO}=60V
- Collector Dissipation P_C=800mW

TO-92



1. Emitter 2. Base 3. Collector

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	45	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	700	mA
Collector Dissipation	P_C	800	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55~150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=100μA, I_E=0	60			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=10mA, I_B=0	45			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E=-100μA, I_C=0	5			V
Collector Cut-off Current	I_{CBO}	V_{CB}=40V, I_E=0			0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=3V, I_C=0			0.1	μA
DC Current Gain	h_{FE}	V_{CE}=2V, I_C=50mA	40		240	
Collector-Emitter Saturation Voltage	V_{CE} (sat)	I_C=0.5A, I_B=50mA		0.24	0.4	V
Base-Emitter Saturation Voltage	V_{BE} (sat)	I_C=0.5A, I_B=50mA	0.7	0.89	1.1	V
Output Capacitance	Cob	V_{CB}=10V, I_E=0 f=1MHz		12		pF

h_{FE} CLASSIFICATION

Classification	R	O	Y
h_{FE}	40-80	70-140	120-240

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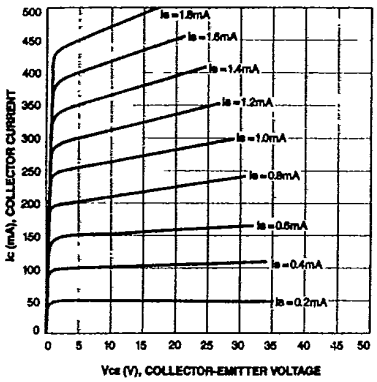
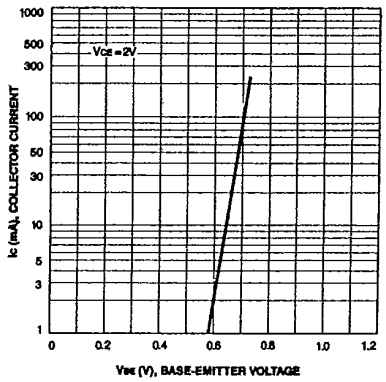
T-29-23

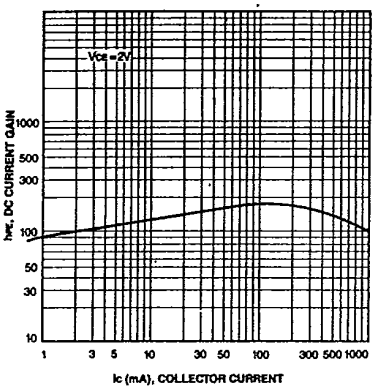
STATIC CHARACTERISTIC



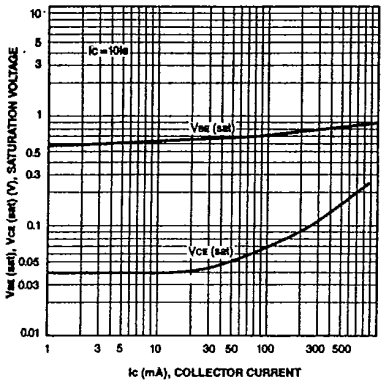
BASE-EMITTER ON VOLTAGE



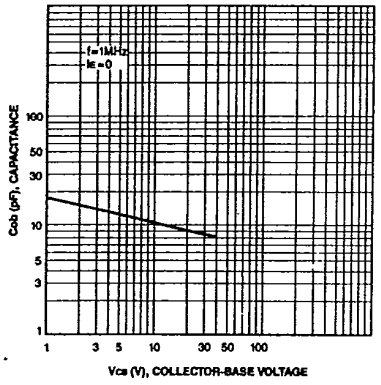
DC CURRENT GAIN



BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE



COLLECTOR OUTPUT CAPACITANCE



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